

**RECEIVED
CENTRAL FAX CENTER****AUG 31 2006****REMARKS**

Claims 1-70, 74, 75, 77 and 82-88 are canceled; and claims 71-73, 76 and 78-81 remain pending in the application.

The pending claims stand rejected over Walker, Sugahara, Bulsara and Hsu. Applicant notes that claim 81 is indicated to be rejected in the Summary section of the Office Action, but no specific rejections are presented in the Detailed Action section. Applicant will assume, for the sake of argument, that the Examiner intended to reject claim 81 over some combination selected from Walker, Sugahara, Bulsara and Hsu.

Claims 71-73, 76 and 78-81 are believed allowable over the cited references for at least the reason that there is no prior art motivation to combine the references to create a system having the recited combination of features of such claims.

Referring initially to claim 71, from which the remaining claims depend, such recites a computer system comprising an inverter which includes a structure comprising silicon and germanium; a PFET supported by the structure; an insulative material over at least a portion of the PFET; a first layer of semiconductive material over the insulative material; a second layer of semiconductive material over the first layer, with the second layer being compositionally different from the first layer; and an NFET over the insulative material and supported by the first and second layers of semiconductive material, with the NFET having a gate which is directly over a gate of the PFET.

The Examiner rejects claim 71 over Walker and Sugahara. Specifically, the Examiner cites Walker to show that it was known in the art to provide a computer system having an inverter which contains a pair of stacked transistor gates; and cites Sugahara to

show that an insulative material and first layer of semiconductive material can be formed between the transistor gates. The Examiner contends that it would be obvious to combine the references with one another to form subject matter of claim 71 because, in the Examiner's opinion, it is obvious that abutting layers of Walker's structure suffer from CTE mismatch that can be cured by incorporating aspects of Sugahara into Walker. The Examiner refers Applicant to an abstract for support for the Examiner's position.

Applicant finds no mention of CTE mismatch in either the abstract of Walker or that of Sugahara. It appears that the Examiner believes that Sugahara is implying that the methods and structures described therein cure CTE mismatch relative to prior art devices. Even assuming that such implication can be found in Sugahara, the reference isn't implying that the devices of Walker suffer from CTE mismatch.

Applicant submits that the Examiner's contentions regarding the obviousness to combine Sugahara with Walker are based on speculation on the part of the Examiner, rather than on specific teachings within the references. No teaching within the references suggests that the structures of Walker suffer from CTE mismatch, and further no teaching within the references suggests that CTE mismatch in the structures of Walker would necessarily be cured through incorporation of features from Sugahara into the devices taught by Walker. Further, there is no direction within the references of which features to take from Sugahara to cure the alleged CTE mismatch of Walker, and which to leave in Sugahara to avoid introducing problems into the fabrication and/or performance of the structures described in Walker.

The Examiner's contention that Walker's devices have CTE mismatch that could be cured by concepts taught in Sugahara is complete supposition in an attempt at hindsight reconstruction of Applicant's invention. The Examiner is reminded that MPEP §§ 2142 and 2143 specifically indicate that there must be reasonable expectation of success from modification of a reference, and that such expectation must be found in the prior art rather than based on impermissible hindsight reconstruction of Applicant's invention.

In the present case, the prior art does not even provide reason to believe that CTE mismatch is a problem in Walker's devices; and the prior art further does not provide a reasonable expectation of success that modification of Walker with teachings of Sugahara will lead to reduction of the alleged CTE mismatch that the Examiner speculates is otherwise inherent in the Walker structure. The Examiner's attempted motivation to combine Sugahara with Walker to render claim 71 obvious is thus not supported by the prior art. The prior art also does not provide any other motivation for combining Walker with Sugahara to produce a system analogous to that claimed with claim 71.


For the above-discussed reasons, claim 71 is allowable over the cited references.

Claims 72, 73, 76 and 78-81 depend from claim 71, and are therefore allowable for at least the reasons for which claim 71 is allowable.

Claims 71-73, 76 and 78-81 are allowable over the cited references for the reasons discussed above, and applicant therefore requests formal allowance of such claims in the Examiner's next action.

Respectfully submitted

Dated: 8/31/06

By: 
David G. Lawless, Ph.D.
Reg. No. 38,533
Wells St. John P.S.